

CESSNA 170B Model Guide

The CESSNA 170B is a single-engine piston, tailwheel, high-wing airplane. The New Zealand type acceptance report describes it as a four-seat, all-metal light aeroplane built from 1952 to 1956, originally known as the Model 171. The library data gives a Continental O-300 of 145 hp, a 100 kt cruise, 500 nm of range and 40 gal of fuel. Because it is a tailwheel airplane from the 1950s, a buyer should focus on the age-related airworthiness directives, the tailwheel bracket and the fuel system.

KEY TAKEAWAYS

- The CESSNA 170B cruises at 100 kt on about 10 gph, has 40 gal of fuel and a listed range of 500 nm.
- Useful load is 950 lbs (empty weight 1450 lbs, max takeoff weight 2400 lbs), with a 200 lb baggage allowance. The NZ type acceptance report lists a maximum takeoff weight of 2200 lb, so confirm the figure against the airplane's own approved documents.
- The NZ airworthiness directive schedule requires windshield and rear spar inspections every 100 hours. The spar inspection is also required after any groundloop or wing damage.
- The original tailwheel bracket commonly cracks in the radius on each side when used under severe conditions. A coil-over tailwheel suspension kit exists for the 170B.
- Many airplanes have an 18 gal Javelin auxiliary fuel tank in the baggage compartment. The NZ AD schedule has an entry for its modification, so check that the installation is documented.

WHAT YOU ARE BUYING

The CESSNA 170B is a high-wing, all-metal, tailwheel airplane that seats up to 4. The library data lists a Continental O-300 of 145 hp. The NZ type acceptance report lists Continental C-145-2, C-145-2H or O-300-A engines, with McCauley or Sensenich fixed-pitch propellers. Dimensions are a 36 ft wingspan, 24.25 ft length and 7.5 ft height. Max speed is 120 kt and cruise is 100 kt. Service ceiling is 14000 ft and rate of climb is 700 fpm.

PERFORMANCE AND LOADING

Takeoff ground roll is 800 ft and 1200 ft to clear 50 ft. Landing roll is 600 ft and 800 ft over 50 ft. Clean stall speed is 50 kt and landing-configuration stall speed is 45 kt. Max demonstrated crosswind is 15 kt. Fuel burn is about 10 gph from 40 gal. The CG range is 34 to 40 inches. Check the weight and balance of the specific airplane, especially if it carries an auxiliary tank or other added equipment.

AIRWORTHINESS DIRECTIVES AND INSPECTIONS

The NZ AD schedule for the 170 Series covers windshield cracking (inspect every 100 hours), mainplane rear spar cracking near the root fitting (every 100 hours and after groundlooping or wing damage), the Javelin auxiliary fuel system, the fuel cap, the electrical system, the fuel selector valve cam, the shoulder harness and the seat adjustment mechanism. Ask for logbook evidence that each applicable item has been done. The FAA is the source of the State of Design ADs, so also check the FAA list.

PRE-BUY FOCUS: TAILWHEEL, ENGINE, FUEL

The 100 hour / annual checklist for the 170 includes compression checks, magneto timing, landing gear legs and tail wheel springs, gear attachment bolts, fuel tanks and lines, wing attachment bolts and lift struts. Per the tailwheel kit instructions, the original bracket commonly has a crack in the radius on each side under severe conditions. Inspect that area. Check the fuel system carefully if an 18 gal auxiliary tank is fitted.

SPECIFICATIONS

Engine Model	Continental O-300
Engine Hp	145
Propeller	McCauley
Wingspan Ft	36
Length Ft	24.25
Height Ft	7.5
Max Speed Kts	120
Cruise Speed Kts	100
Range Nm	500
Fuel Capacity Gal	40
Rate Of Climb Fpm	700
Service Ceiling Ft	14000
Empty Weight Lbs	1450
Max Takeoff Weight Lbs	2400

PERFORMANCE

Cruise Speed Kts	100
Max Speed Kts	120
Fuel Burn Gph	10
Takeoff Distance Ft	800
Takeoff Over 50ft Ft	1200
Landing Distance Ft	600
Landing Over 50ft Ft	800
Max Crosswind Kts	15
Best Glide Speed Kts	65
Stall Speed Clean Kts	50
Stall Speed Landing Kts	45

V-SPEEDS

Va Kts	100
Vr Kts	60
Vx Kts	65
Vy Kts	75
Vfe Kts	85
Vne Kts	165
Vno Kts	125
Vs1 Kts	50
Vso Kts	47
Vref Kts	60

WEIGHT & BALANCE

Empty Weight Lbs	1450
Basic Empty Weight Lbs	1450
Useful Load Lbs	950
Max Takeoff Weight Lbs	2400
Max Ramp Weight Lbs	2400
Max Landing Weight Lbs	2400

Baggage Allowance Lbs	200
Cg Range Min Inches	34
Cg Range Max Inches	40

SAFETY NOTES

- Inspect the mainplane rear spar near the root fitting for cracks, especially if the airplane has been groundlooped or had wing damage.
- Inspect the windshield, its rivets and its rubbing strips every 100 hours, per the NZ AD schedule.
- Inspect the original tailwheel bracket for cracks. A crack may be there after severe use.
- Confirm the maximum takeoff weight from the airplane's own approved documents, because the sources differ (2400 lbs in the library data, 2200 lb in the NZ report).